

**A RESOLUTION**

**BY CITY UTILITIES COMMITTEE**

**02- R -0899**

A RESOLUTION AUTHORIZING THE MAYOR OR DESIGNEE TO ISSUE A NOTICE TO PROCEED WITH MAYES, SUDDERTH & ETHEREDGE, INC./HARRINGTON, GEORGE & DUNN, PC - JV FOR FC-6710-96B, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES TO PROVIDE COMBINED SEWER EVALUATION AND CONCEPTUAL DESIGN OF SEWER SEPARATIONS ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS IN AN AMOUNT NOT TO EXCEED SIX MILLION SEVEN HUNDRED SEVENTY-SEVEN THOUSAND FIVE HUNDRED DOLLARS (\$6,777,500.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND ACCOUNT AND CENTER NUMBERS: 2J26 524001 M56I21049999, 2J26 524001 M56I21019999, 2J27 574001 M24I02679999, AND 2J27 574001 M24I02689999.

**WHEREAS**, the City of Atlanta did enter into FC-6710-96B, Annual Contract for Architectural and Engineering Services; and

**WHEREAS**, the Department of Public Works does require a combined sewer evaluation and conceptual design of sewer separation in an amount not to exceed Forty-five Thousand Dollars (\$45,000.00); and

**WHEREAS**, the Commissioner of the Department of Public Works and the Director of the Bureau of Purchasing and Real Estate have recommended that Mayes, Sudderth & Etheredge, Inc./Harrington, George & Dunn, PC - JV, to begin on Phase 1 of a two phase study to update the GIS sewer, parcel, and land use coverages with data from manhole inspection surveys, GPS locations, closed circuit television surveys, and sewer trunk line surveys; and

**NOW THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF ATLANTA, GEORGIA**, that the Mayor be and is hereby authorized to approved Notice To Proceed with Mayes, Sudderth & Etheredge, Inc./Harrington, George & Dunn, PC - JV, for FC-6710-96B, Annual Contract for Architectural and Engineering Services in an amount not to exceed Forty-five Six Million Seven Hundred Seventy-seven Thousand Five Hundred Dollars (\$6,777,500.00).

**BE IT FURTHER RESOLVED**, that the Director of Purchasing be and is hereby directed to prepare an appropriate contractual agreement for execution by the Mayor, to be approved by the City Attorney as to form.

**BE IT FURTHER RESOLVED**, that this Notice to Proceed should not become binding on the City, and the City shall incur no liability upon same until such contract has been executed by the Mayor and delivered to the contracting party.

**BE IT FINALLY RESOLVED**, that all services for said Notice to Proceed shall be charged to and paid from fund account and center numbers: 2J26 524001 M56I21049999, 2J26 524001 M56I21019999, 2J27 574001 M24I02679999 and 2J27 574001 M24I02689999.

KOB (4/29/02)



# CITY OF ATLANTA

SHIRLEY FRANKLIN  
MAYOR

55 TRINITY AVENUE / ATLANTA, GEORGIA 30335-3029  
SUITE 5800, CITY HALL SOUTH  
(404) 330-6073 / FAX: (404) 658-7631

## DEPARTMENT OF PUBLIC WORKS

Norman Koplon, PE  
Commissioner

David W. Peters, PE  
John W. Griffin, Jr.  
Garney Ingram-Reid  
Deputy Commissioners

TO: Felicia Strong Whitaker  
FROM: David W. Peters, PE  
SUBJECT: MSE/HDR CSO Evaluation and Separation Plan  
DATE: Tuesday, April 30, 2002  
CC: Keith Brooks

The Department of Public Works hereby recommends that MSE/HDR be awarded the CSO evaluation and sewer separation analysis under annual contract FC-6710-96B for \$6,777,500.00. We anticipate this project to end in December 2002.

The Notice-to-Proceed (NTP) issued by the City will also authorize services previously accomplished and incorporated herein dating back to the original December 03, 2001 resolution of the initial phase of this project by the City Council (01-R-2034). The NTP was never given due to the use of the wrong annual contract. The total fee of \$6,777,500.00 includes the previously approved \$1,277,500 for the initial phase of work accomplished to date which is proposed for reauthorization through this project.

CITY OF ATLANTA  
BUREAU OF PURCHASING  
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**City of Atlanta**  
**CSO Evaluation and Separation Plan**  
**with Non-Point Source Pollution Control Plan**

**MSE/HGD PROPOSED SERVICES**  
**Work Authorization Request Under Annual Contract FC-6710-96B**

The MSE/HGD Joint Venture herewith proposes to provide engineering services as set forth herein for the preparation of conceptual Separation Plans and Non-Point Source Pollution Control Plans for the City of Atlanta's Combined Sewer Service Areas (Project). In order to provide continuity with earlier work on the Project, the MSE/HGD Joint Venture intends to subcontract a portion of the services set forth herein to HDR/WLJorden and to have HDR/WLJorden retain the Project Management and Technical Oversight role through the completion of the Project.

The objective of the Project is to develop more reliable conceptual designs and cost estimates for the separation of sanitary flows and the treatment of storm flows within existing City of Atlanta combined sewer service areas. The more reliable designs and cost estimates for sewer separation and storm water treatment will provide a more reliable comparison to the proposed tunnel systems being prepared by others and assist the City in determining the most cost effective management approach available to meet U.S. EPA consent decree obligations.

This proposal includes the initial phase of this Project as previously authorized by the City to be performed by HDR/W.L. Jorden. The work included in the initial phase has been accomplished. With the approval of this proposal, the work previously authorized and completed is reauthorized and encompassed in this proposal.

**SCOPE OF SERVICES**

**1. Data Collection & Database Construction**

Update GIS sewer, parcel, and land use coverages with data from manhole inspection surveys, GPS locations, closed circuit television surveys, and City of Atlanta sewer trunk line surveys. Refine the delineation of storm catchments and sanitary service areas. Obtain updated parcel, building and land use data for use in producing storm and sanitary flow estimates.

The layout and design of the relief sewers and replacement sewers requires geotechnical information to determine the presence, or depth, of rock along proposed corridors. In addition, the presence of rock in proposed detention sites should also be investigated. Geotechnical investigations will be performed to determine the top of rock or to a depth of two-feet below the proposed invert of the pipe or detention structure. The depth of groundwater will be identified if encountered during the investigation procedures.

April 15, 2002

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These needs will be accomplished in the following tasks.

- A. East Area Data Updates
- B. Completion of West Area Data
- C. Phase V Data Collection
- D. SSES Inspections
- E. LiDAR Data
- F. RTK Surveys
- G. Parcel, Land Use and BMP Data

Reason: City's records are lacking current information on location and condition of existing combined sewers.

**2. Public Education, Public Awareness Program Assistance & Planning Coordination**

Assist the City in presenting watershed information with the GIS Decision Support System, including mapping and other formats requested by the City or the City's representative. Assist the City in gathering and recording public input to be utilized for studying options for solutions. Assist the City in the coordination of information sources including field data, regional studies, reports from environmental and other educational groups, consultant studies, and City staff. Assist the City in utilizing the information during work sessions with City staff as well as citizens and elected officials. Assist planning staff with research and development of information that will offer guidance on zoning specifications with regard to pervious surfaces, gravel wells, and tree strip plantings as storm water BMPs.

Reason: City staff needs support resources to involve public, interest groups, and elected officials in separation planning

**3. Modeling Existing System & Improvements**

Refine delineations of storm catchments and sanitary service areas based on newly available configuration and elevation information. Import GIS information into an XPSWMM hydraulic model and calibrate model based on best available flow meter data. Model the existing system and analyze 1, 5-year and 10-year storms results. Define and incorporate cost factors into the HDRLink GIS-based model setup and cost estimating tool. Model a 10-year storm event of the conceptual system to determine areas to proposed system improvements and determine the conceptual capacity of the improved system.

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Reason: Land use changes in the City have overloaded many lines of the combined sewer system, which need to be identified for upsizing.

**4. Separation Plan Engineering & Cost Estimating**

Perform engineering Quality Control checks during modeling phase of the project. Evaluate existing conditions data and modeling outputs to determine the approach for separation along pipe segments, review pipe size requirements, evaluate use of existing pipes, and recommend new pipe configurations. Prepare plan and profile sheets at a scale of 1" = 100' for use in cost estimating and as a preliminary plan. Prepare reports as needed to document separation plan preliminary design and cost estimating. Cost estimating will include a review of sewer line condition information, including television recordings of lines to determine estimated rehabilitation needs.

Reason: Conceptual separation plan must be developed in sufficient detail to provide reliable cost estimates for separation.

**5. BMP Evaluation, Design & Cost Estimating**

Analyze the feasibility and potential benefits of best management practices (BMP) for storm water in the separation plan. This analysis will include conceptual cost for land acquisition, construction and long-term maintenance. Evaluate the effectiveness and compatibility of storm water BMP alternatives for each sub-basin using updated CSO data and updated conceptual separation plan information. Calculate cost estimates for storm water BMP alternatives in each sub-basin. This work will be conducted in two phases: an Evaluation Phase and a Design and Cost Estimating phase, and will include public participation aspects to better address citizen concerns.

- A. Evaluation
- B. Design & Cost Estimating

Reason: Mitigation measures for non-point source pollution load for a separated system must be developed for evaluation of alternatives.

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**6. Special Project Requests**

This task serves to provide funds for special project requests that accompany the type of data collection, modeling and preliminary design work conducted as part of this contract. Whenever this type of project is undertaken, the data and methodologies that are made available are inevitably useful for other demands that arise. During previous work of a similar nature, a variety of field verifications, modeling services, custom mapping and analyses that were outside the original scope of services have been requested. Therefore, this task is included in order to provide a way for these necessary services to be provided, while not taking time or budget away from the main scope of the project – producing conceptual separation plans and cost estimates.

As requested, we will utilize the GIS Decision Support System that has been developed for the CSO program to determine sewer capacity and the effects of modifications to the sewer system in scenarios that are not required for conceptual separation plan development. These services will include existing data compilation, storm catchments and service area delineation where necessary, modeling, calibration, analysis, and quality control. We will also utilize the GIS Decision Support System that has been developed for the CSO program to provide statistical and graphical data analysis as needed by the City, and other consultants involved in the CSO project as designated by the City of Atlanta to prepare graphical or statistical data generally in the form of a database, spreadsheet or map.

- A. Design of Inman Park Flooding Analysis Recommendations
- B. Design of Stockade Trunk Flooding Analysis Recommendations
- C. Utoy Separation Services
- D. North Fork Relief Sewer Services
- E. Other Special Projects

Reason: As the separation planning efforts advance, unanticipated problems will surface which are likely to result in requests for additional investigation.

**7. Downtown Separation Plan & Cost Estimating**

It has been recognized that the core downtown area presents unique circumstances for data collection and construction due to the density and age of buildings, the street network, and utilities in that area. These conditions make sewer separation planning, design and construction much more challenging in this area. Therefore, a separate task has been defined that will allow for field data collection to be conducted taking into account increased traffic control and other safety considerations. Additional research for storm and sanitary sewer connections in the older buildings downtown would be taken

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into account. The cost estimating, including higher-level construction methods, will be taken into account. These actions are required in order to produce a separation plan and cost estimates in this area. The scope of this proposal includes data collection, research, separation planning, and cost estimating for an area representing approximately 20% of the downtown area. This will provide a basis for projecting area wide costs using unit costs based on the 20% sample and comparing these to "typical" unit costs in other areas.

Reason: "Typical" unit costs are not adequate for estimating the cost of the separating combined system in the core of downtown.

**8. Project Management**

In order to provide the required level of coordination and control of the seven previous tasks, a fulltime project manager and fulltime administrative assistant, in addition to the seven task managers, will be necessary. In addition, the services of project principals with in-depth knowledge of the history and goals of this project will be essential. The complexity and magnitude of the project call for the expertise of senior managers in order to coordinate the multi-faceted tasks required to successfully complete the work.

**SCHEDULE**

To make certain that information produced through the Project will be available to incorporate into the City's decision making process in compliance with the consent decree schedule, time will be of the essence. Work described in this proposal will be accomplished within 150 calendar days from the date that Notice-to-Proceed is issued to MSE/HGD by the City. The Notice-to-Proceed issued by the City will also authorize services previously accomplished and incorporated herein dating back to the original December 03, 2001 authorization of the initial phase of this Project by the City Council.

**BUDGET**

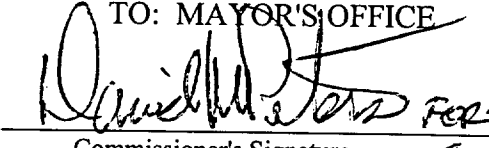
The attached tabulation summarizes the fee proposed to accomplish the services described herein. The total fee of \$6,777,500.00 includes the previously approved \$1,277,500 for the initial phase of work accomplished to date which is proposed for reauthorization through this Project.

April 15, 2002



# TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE

  
Commissioner's Signature

ATTN: GREG PRIGDEON

  
Director's Signature

Originating Department: Public Works

Contact Person: Keith Brooks X 6382

Committee(s) of Purview: City Utilities

Council Deadline: May 3, 2002

Committee Meeting Dates(s): May 14 – 15, 2002

Full Council Date: May 20, 2002

## CAPTION

A RESOLUTION AUTHORIZING THE MAYOR OR DESIGNEE TO ISSUE A NOTICE TO PROCEED WITH MAYES, SUDDERTH & ETHEREDGE, INC./HARRINGTON, GEORGE & DUNN, PC - JV FOR FC-6710-96B, ANNUAL CONTRACT FOR ARCHITECTURAL AND ENGINEERING SERVICES TO PROVIDE COMBINED SEWER EVALUATION AND CONCEPTUAL DESIGN OF SEWER SEPARATIONS ON BEHALF OF THE DEPARTMENT OF PUBLIC WORKS IN AN AMOUNT NOT TO EXCEED SIX MILLION SEVEN HUNDRED SEVENTY-SEVEN THOUSAND FIVE HUNDRED DOLLARS (\$6,777,500.00); ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND ACCOUNT AND CENTER NUMBERS: 2J26 524001 M56I21049999, 2J26 524001 M56I21019999, 2J27 574001 M24I02679999, AND 2J27 574001 M24I02689999.

## BACKGROUND

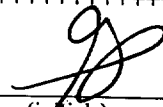
To provide Biosolids Evaluation for the Department of Public Works.

**FINANCIAL IMPACT (if any)**     \$ 6,777,500.00

## *Mayor's Staff Only*

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Received by Mayor's Office: \_\_\_\_\_  
(date)

Reviewed by:  \_\_\_\_\_  
(initials) (date)

Submitted to Council: \_\_\_\_\_  
(date)

Action by Committee:    ☐ Approved    ☐ Adversed    ☐ Held    ☐ Amended  
                                 ☐ Substitute    ☐ Referred    ☐ Other